The Environmental Council of the States
Subcommittee on Water Resources and Environment
of the House Committee on Transportation and Infrastructure
Numeric Nutrient Standards

Summary: Although not required by the Clean Water Act, the U.S. Environmental Protection Agency (EPA) is insisting that states develop numeric, rather than narrative, standards for nitrogen and phosphorous (nutrients) in waters that discharge from point sources. Nutrients, though not generally toxic to humans, are a widespread problem pollutant affecting many, if not most of our rivers, lakes and coastal areas. Numeric standards do provide certainty for dischargers and are easier to interpret and implement than narrative standards, so most states do not oppose the use of reasonable and practical numeric standards where appropriate. However, it remains an open question as to whether EPA will let the states effectively use the tools of flexibility, innovation, and collaboration among stakeholders as a means of achieving long-term water quality goals. EPA's inflexibility, if it chooses that path, will impair the states' ability to make both immediate and long-term progress in the continuing battle to clean up waters of the U.S.

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Testimony: I am testifying on behalf of the leaders of the state and territorial environmental agencies that are the members of the Environmental Council of the States. I am the President of that Council, and the director of Montana's Department of Environmental Quality.

Many states, including Montana, are in the process of developing numeric nutrient standards. In water quality jargon, the term "Nutrients" refers to the nitrogen and phosphorus compounds found in surface and ground water. Indeed these two elements do support the growth of plants large and small, terrestrial and aquatic and are essential elements for the support of plant life in general. When either or both of these elements are present in excess amounts, they are considered pollutants because they harm beneficial uses (fishing, swimming, drinking) of water bodies. Nutrient pollution comes from many sources, including stormwater runoff, septic systems, municipal wastewater discharges, air deposition, and a variety of agricultural sources.

Few, if any, dispute the fact that nutrient pollution is one of the top causes of water quality impairment in the country. A May 3, 2010 article authored by the U.S. Environmental Protection Agency; the Association of State and Interstate Water Pollution Control Administrators; and the Association of State Drinking Water Administrators listed the following facts:

- Nutrient pollution is linked to over 14,000 water segments in the U.S. listed as impaired.
- Over two million acres of lakes and reservoirs across the country are impaired and not meeting the standards set for those waterbodies due to excess nutrients.
- Seventy-eight percent of the assessed continental U.S. coastal areas exhibit symptoms of eutrophication (i.e., too much nitrogen and phosphorus).

The federal Clean Water Act does not require states to develop numeric nutrient standards. States have the discretion to use narrative, rather than numeric standards. However, in response to the Gulf hypoxia issue, EPA announced in 1998 that the states would be required to adopt numeric nutrient standards. A couple of years after that, Montana agreed to do so for the following reasons:

- Narrative criteria are often difficult to interpret.
- Numeric standards prevent "regulation creep," meaning goals are clearly defined for point source dischargers who are required to comply with water quality standards.
- Numeric standards are likely to provide better protection of the states' beneficial uses.
- Numeric standards allow for more consistent implementation.

Many states have been developing, and some have already developed, numeric nutrient standards since EPA's 1998 initiative. My state of Montana has developed but not adopted numeric water quality criteria intended to control excessive nutrient pollution in Montana's streams, rivers, and lakes. The Montana DEQ based the numeric nutrient criteria on the best available science and data, taking into account the effects on eutrophication of stream temperatures, flow patterns, light levels, and grazing on algae and plants by fish and aquatic insects.

In Florida, EPA was required by litigation to adopt the state's draft numeric nutrient standards. Montana is in a similar position in that the state has drafted standards but not yet formally adopted them in rule. Our standards are scientifically defensible and protective of waters of the state and U.S. The only problem, and it is a significant one, is that the standards are not achievable. In almost all cases, industries and municipalities simply cannot afford to remove as much nitrogen and phosphorous as our standards would require. Also, the cleanup technology hasn't adequately caught up to the treatment needs. Adoption of these standards today would immediately make every discharger a violator, and it would do nothing to clean up Montana's waters.

In March 2011, Nancy Stoner, Acting Assistant Administrator for EPA's Office of Water, issued a Memo entitled "Working in Partnership with States to Address Phosphorous and Nitrogen through Use of a Framework for State Nutrient Reductions." Among the points made in the memo are the following items:

- "Our resources can best be employed by catalyzing and supporting actions by states.."
- "States need room to innovate and respond to local water quality needs…"
- "A one-size-fits-all solution … is neither desirable nor necessary."
- "States, EPA, and stakeholders, working in partnership, must make greater progress in accelerating the reduction of nitrogen and phosphorous to loadings to our nation's waters."

The memo is clear about EPA's push for states to make effective use of the tools of flexibility, collaboration, and innovation to achieve immediate improvements to water quality. Montana takes EPA at its word.

My department has worked on the nutrient standards issue for four years with a stakeholder group comprised of members from municipalities. Two years ago, that stakeholder group expanded to include environmental groups and industry. Montana is one of the leading states in terms of working with stakeholders to develop implementation plans for the new numeric standards. The result of our efforts was a bill passed in April 2011 by a near-unanimous vote of both our House and Senate. SB 367 acknowledges the impracticality of adopting tight standards that cannot be achieved with today's technology and in light of the economic status of our cities and businesses. It establishes a general variance process as a first significant step towards implementing strict numeric surface water standards for nitrogen and phosphorous across the state. Most importantly, the bill lays out a structured path forward for achieving the standards over a specific timeframe, which is considered reasonable according to EPA memos. Implementation of SB 367 will result in immediate improvement to water quality in Montana for the following reasons:

- 70% of Montana's large dischargers (representing ~80% of our state's permitted volume) will require immediate upgrades just to meet the variance treatment minimums in the bill.
- 30% of our smaller dischargers will require immediate upgrades.
- 2/3 of our facilities with discharge permits would require additional nutrient monitoring.

Each variance is granted for a specific period and must be re-justified every 3 years.

Montana was faced with a decision: it could adopt strict standards and impose them on all Montana's dischargers immediately, knowing it would be years, perhaps decades before the standards would be achieved by a significant number of our permittees. Or it could work with stakeholders to develop a plan that a) establishes a long-term water quality goal in the form of strict numeric nutrient standards, b) results in immediate water quality improvements; c) is tailored to our state's unique needs; and d) has the buy-in of a diverse group of stakeholders, including the environmental community.

Montana has shown exactly the flexibility, collaboration among our stakeholders, and innovation called for in EPA's March 2011 memo, as well as in previous EPA memos. EPA's reaction to our variance process has been decidedly lukewarm. Initially, its discomfort with the word "variance" obscured its vision of the progress which Montana's approach will produce. There are recent signs, however, that EPA is willing to work with us to develop a legal way to implement our variance. This should not be difficult to do since our approach is consistent with and certainly not in violation of the federal Clean Water Act. EPA is faced with a choice of embracing Montana's efforts and considering us as a model for other states to emulate if not outright imitate, or essentially banning our implementation of SB 367 by objecting to permits we issue that apply the variance. If EPA ultimately rejects our variance process, Montana will not proceed with the adoption of our numeric nutrient standards. We will only do so when required by EPA. Our stakeholders will be angry. Our dischargers will make no improvements to their systems for years until they can raise money from the dwindling SRF program. And the nutrient problem will grow worse over that time period. This is not the outcome any of us prefer.

Montana's position is somewhat unique, in that EPA supports the criteria we developed. But other

states, like Nebraska, have faced objections by EPA to proposed numeric nutrient criteria – not because those criteria lacked scientific justification, not because the criteria violated the Clean Water Act, but because EPA simply didn't think they were strict enough.

We support EPA's efforts to have states adopt numeric nutrient standards. However, EPA must be willing to accept the flexibility and innovation it encouraged the states to demonstrate – not just in Montana, but in all states that are willing to make progress on the battle to reduce nitrogen and phosphorous loading to our nation's waters.